

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1. (Currently Amended) An apparatus, comprising:
2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;
7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;
9 a display unit for displaying information extracted from the image and character data;
10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;
13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response

15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal; and

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal,

20 said letter storing unit being divided into a plurality of areas accommodating image and
21 character data corresponding to an electronic letter addressed to a certain user being stored at an area
22 assigned to the user.

1 Claim 2. (Original) The apparatus of claim 1, said letter storing unit included within a
2 personal computer.

1 Claim 3. (Original) The apparatus of claim 1, said user interface unit outputting said display
2 requesting signal and said account control signal in response to a valid password inputted by a user.

1 Claim 4. (Currently Amended) An apparatus, comprising:
2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;
10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal; and

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal,

20 ~~The apparatus of claim 1,~~ the displayed information including the number of the accounts
21 of the users, the number of letters addressed to each account and the subjects of the letters, and the
22 information selected by the authorized user being an account number and the subjects of the letters.

1 Claim 5. (Original) The apparatus of claim 1, further comprising a memory storing a system
2 program instructing said controller.

1 Claim 6. (Currently Amended) An apparatus, comprising:

2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;

10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal;

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal; and

20 a memory storing a system program instructing said controller,

21 The apparatus of claim 5, with said memory being a flash memory.

1 Claim 7. (Currently Amended) An apparatus, comprising:

2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;

10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal;

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal; and

20 a memory storing a system program instructing said controller,

21 ~~The apparatus of claim 5,~~ with said memory being an erasable programmable read only

memory.

Claim 8. (Currently Amended) An apparatus, comprising:

an electronic letter receiver for converting received data corresponding to a letter received from a mail server into image and character data and outputting the image and character data, said electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail to the mail server, the mail server having a unique address on a network and performing a mail service function;

a letter storing unit accommodating sorting and storing of the image and character data by the account of users;

a display unit for displaying information extracted from the image and character data;

a user interface unit outputting a display requesting signal when an authorized user requests to view a letter addressed to the authorized user and outputting an account control signal having information selected by the authorized user from the displayed information;

a controller storing the image and character data received from the electronic letter receiver in the letter storing unit, outputting the stored image and character data to the display unit in response to the display requesting signal, reading image and character data selected from among the stored image and character data based on the account control signal, from the letter storing unit, and outputting the read image and character data together with a printing control signal; and

a printer for printing a letter corresponding to the image and character data selectively read by said controller, in response to the printing control signal,

20 ~~The apparatus of claim 1~~, with said electronic letter receiver being a modem performing
21 modulation and demodulation for transmitting and receiving signals over a communication line.

1 Claim 9. (Original) The apparatus of claim 1, said electronic letter receiver converting
2 received data corresponding to the letter under the control of the controller.

Claim 10. (Cancelled)

1 Claim 11. (Currently Amended) An apparatus, comprising:
2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;
10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver

14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal; and
18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal,

20 ~~The apparatus of claim 1,~~said letter storing unit including backup function for
21 accommodating a power failure.

1 Claim 12. (Original) The apparatus of claim 1, said display unit displaying information
2 extracted from the image and character data received from said controller to a user having the
3 authority to view the information.

1 Claim 13. (Original) The apparatus of claim 1, said interface unit selected from the group
2 consisting of a keypad and a mouse accommodating the display requesting signal to be generated
3 only when authorized users inputs a valid password by manipulating the keys of the keypad or the
4 mouse.

1 Claim 14. (Currently Amended) An apparatus, comprising:
2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said

4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;

10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal;

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal; and

20 ~~The apparatus of claim 1, further comprising a scanner accommodating facsimile~~
21 ~~transmission of image data processed by said scanner under the control of said controller.~~

1 Claim 15. (Original) The apparatus of claim 1, further comprising a computer interface
2 connecting a personal computer with said controller, said personal computer comprising said letter

3 storing unit.

1 Claim 16. (Currently Amended) An apparatus, comprising:

2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;
10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal;

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal; and

20 a computer interface connecting a personal computer with said controller, said personal
21 computer comprising said letter storing unit,

22 ~~The apparatus of claim 15,~~ said computer interface unit selected from the group consisting
23 of parallel port, and universal serial bus.

1 Claim 17. (Currently Amended) An apparatus, comprising:

2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;
10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and

17 outputting the read image and character data together with a printing control signal;

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal; and

20 a computer interface connecting a personal computer with said controller, said personal
21 computer comprising said letter storing unit,

22 ~~The apparatus of claim 15,~~ said computer interface receiving data scanned by a scanner and
23 transmitting the data from the scanner to said letter storing unit of the personal computer.

1 Claim 18. (Original) The apparatus of claim 1, said printer automatically printing a letter
2 corresponding to the image and character data selectively read by said controller, in response to the
3 printing control signal.

1 Claim 19. (Currently Amended) A method, comprising the steps of:
2 automatically connecting to a mail server without user input and automatically converting
3 received data corresponding to each letter received from a server into image and character data, each
4 letter transferred by electronic mail to the server from a plurality of users, the server having a unique
5 address on a network and performing a mail service function, and sorting and storing the image and
6 character data by an account of the user;

7 continuously determining whether an authorized user requests to view letters addressed to
8 the authorized user;

9 displaying information extracted from the stored image and character data when the

10 authorized user requests to view said letters addressed to the authorized user;
11 determining information selected by the authorized user from the displayed information;
12 reading image and character data corresponding to the selected information among the stored
13 image and character data; and
14 printing the letters corresponding to the image and character data read by said step of reading
15 image and character data.

1 Claim 20. (Original) The method of claim 19, further comprising the step of printing a letter
2 corresponding to the data read in said step of reading image and character data when the authorized
3 user requests to print the letter.

1 Claim 21. (Original) The method of claim 19, said step of sorting and storing the image and
2 character data by the account of a user being stored in a personal computer.

1 Claim 22. (Previously Presented) A method, comprising the steps of:
2 converting received data corresponding to each letter received from a server into image and
3 character data, each letter transferred by electronic mail to the server from a plurality of users, the
4 server having a unique address on a network and performing a mail service function, and sorting and
5 storing the image and character data by an account of the user;
6 continuously determining whether an authorized user requests to view letters addressed to
7 the authorized user;

8 displaying information extracted from the stored image and character data when the
9 authorized user requests to view said letters addressed to the authorized user;

10 determining information selected by the authorized user from the displayed information; and
11 reading image and character data corresponding to the selected information among the stored
12 image and character data,

13 the step of converting received data and sorting and storing the image and character data,
14 comprising the steps of:

15 accessing the server;
16 setting K as the number of registered accounts, K being within the range of $1 \leq K \leq$ the number
17 of accounts, the number of registered accounts being a portion or all of the number of accounts;

18 logging onto the accessed server with a K-th account;

19 determining whether there is any letter addressed to the K-th account;

20 decreasing K by one when there is no letter addressed to the K-th account and going back to
21 said step of logging into the accessed server;

22 receiving a letter from the server if there is at least one letter addressed to the K-th account;

23 converting received data corresponding to the received letter into image and character data;

24 sorting and storing the image and character data by the accounts of the users;

25 determining whether K is equal to one and going back to said step of decreasing K by one
26 when K is not equal to one; and

27 releasing the access to the server when K is equal to one.

1 Claim 23. (Previously Presented) A method, comprising the steps of:

2 converting received data corresponding to each letter received from a server into image and
3 character data, each letter transferred by electronic mail to the server from a plurality of users, the
4 server having a unique address on a network and performing a mail service function, and sorting and
5 storing the image and character data by an account of the user;

6 continuously determining whether an authorized user requests to view letters addressed to
7 the authorized user;

8 displaying information extracted from the stored image and character data when the
9 authorized user requests to view said letters addressed to the authorized user;

10 determining information selected by the authorized user from the displayed information; and
11 reading image and character data corresponding to the selected information among the stored
12 image and character data,

13 said step of continuously determining whether an authorized user request to view letters
14 addressed to the authorized user, comprising the steps of:

15 continuously determining whether a user requests to view letters;
16 receiving a password input by the user when it is determined the user requests to view letters;
17 determining whether the password is valid and going back to said step of receiving a
18 password input by the user when the password is not valid; and
19 determining the user as an authorized user when the password is valid.

1 Claim 24. (Previously Presented) A method, comprising the steps of:

2 converting received data corresponding to each letter received from a server into image and
3 character data, each letter transferred by electronic mail to the server from a plurality of users, the
4 server having a unique address on a network and performing a mail service function, and sorting and
5 storing the image and character data by an account of the user;

6 continuously determining whether an authorized user requests to view letters addressed to
7 the authorized user;

8 displaying information extracted from the stored image and character data when the
9 authorized user requests to view said letters addressed to the authorized user;

10 determining information selected by the authorized user from the displayed information;

11 reading image and character data corresponding to the selected information among the stored
12 image and character data; and

13 printing a letter corresponding to the data read in said step of reading image and character
14 data when the authorized user requests to print the letter,

15 said step of reading image and character data comprising the steps of:

16 determining whether every letter addressed to the account of the authorized user indicated
17 by the selected information is to be printed;

18 reading the stored image and character data corresponding to every letter when it is
19 determined that the every letter is to be printed and proceeding to said step of printing a letter
20 corresponding to the data read;

21 displaying the subject of letters addressed to an account indicated by the selected information
22 when it is determined that every letter is not to be printed;

23 determining at least one subject selected by the authorized user from the displayed subjects;
24 and
25 reading only the stored image and character data corresponding to a letter having the
26 determined subject.

1 Claim 25. (Original) The method of claim 19, said steps being implemented by a program
2 stored in a memory.

1 Claim 26. (Previously Presented) A method, comprising the steps of:
2 converting received data corresponding to each letter received from a server into image and
3 character data, each letter transferred by electronic mail to the server from a plurality of users, the
4 server having a unique address on a network and performing a mail service function, and sorting and
5 storing the image and character data by an account of the user;
6 continuously determining whether an authorized user requests to view letters addressed to
7 the authorized user;
8 displaying information extracted from the stored image and character data when the
9 authorized user requests to view said letters addressed to the authorized user;
10 determining information selected by the authorized user from the displayed information; and
11 reading image and character data corresponding to the selected information among the stored
12 image and character data,
13 the step of converting received data and sorting and storing the image and character data,

14 comprising the steps of:

15 accessing the server;

16 setting K as one;

17 logging onto the accessed server with a K-th account;

18 determining whether there is any letter addressed to the K-th account;

19 increasing K by one when there is no letter addressed to the K-th account and going back to

20 said step of logging into the accessed server;

21 receiving a letter from the server if there is at least one letter addressed to the K-th account;

22 converting received data corresponding to the received letter into image and character data;

23 sorting and storing the image and character data by the accounts of the users;

24 determining whether K is equal to the number of registered accounts and going back to said

25 step of increasing K by one when K is not equal to the number of registered accounts; and

26 releasing the access to the server when K is equal to the number of registered accounts.

1 Claim 27. (Original) The method of claim 19, further comprising the step of viewing the
2 letters and printing a letter corresponding to the data read in said step of reading image and character
3 data when the authorized user requests to print the letter.

Claim 28. (Cancelled)

1 Claim 29. (Currently Amended) A method, comprising the steps of:

2 converting received data corresponding to each letter received from a server into image and
3 character data, each letter transferred by electronic mail to the server from a plurality of users, the
4 server having a unique address on a network and performing a mail service function, and sorting and
5 storing the image and character data by an account of the user;

6 continuously determining whether an authorized user requests to view letters addressed to
7 the authorized user;

8 displaying information extracted from the stored image and character data when the
9 authorized user requests to view said letters addressed to the authorized user;

10 determining information selected by the authorized user from the displayed information;
11 reading image and character data corresponding to the selected information among the stored
12 image and character data; and

13 printing the letters corresponding to the image and character data read by said step of reading
14 image and character data.

15 ~~The method of claim 19~~, with said letter being stored in a storing unit, said letter storing unit
16 being divided into a plurality of areas accommodating image and character data corresponding to an
17 electronic letter addressed to a certain user being stored at an area assigned to the user, and

18 after said step of determining information selected, the authorized user is only allowed to
19 view electronic letters corresponding to data read from the letter storing unit instead of printing the
20 letters.

1 Claim 30. (New) An apparatus, comprising:

2 an electronic letter receiver for converting received data corresponding to a letter received
3 from a mail server into image and character data and outputting the image and character data, said
4 electronic letter receiver receiving each letter from a plurality of users transferred by electronic mail
5 to the mail server, the mail server having a unique address on a network and performing a mail
6 service function;

7 a letter storing unit accommodating sorting and storing of the image and character data by
8 the account of users;

9 a display unit for displaying information extracted from the image and character data;

10 a user interface unit outputting a display requesting signal when an authorized user requests
11 to view a letter addressed to the authorized user and outputting an account control signal having
12 information selected by the authorized user from the displayed information;

13 a controller storing the image and character data received from the electronic letter receiver
14 in the letter storing unit, outputting the stored image and character data to the display unit in response
15 to the display requesting signal, reading image and character data selected from among the stored
16 image and character data based on the account control signal, from the letter storing unit, and
17 outputting the read image and character data together with a printing control signal; and

18 a printer for printing a letter corresponding to the image and character data selectively read
19 by said controller, in response to the printing control signal,

20 with said electronic letter receiver being automatically connecting to said mail server without
21 user input, accommodating said controller accessing said mail server by transmitting access signals
22 for checking whether the mail server is on, whether the mail server can provide a mail service

23 function via said electronic letter receiver,
24 with said controller classifying said electronic mail of users according to the previously input
25 mail accounts.